CI/SfB

(4-) Jh

BRC Special Products
Carver Road
Astonfields Industrial Estate
Stafford
Staffordshire ST16 3BP
Tel: 01785 222288 Fax: 01785 240029
e-mail: stafford.technical@brc-special-products.co.uk
website: www.brc-special-products.co.uk

Agrément Certificate No 93/2953
*Third issue**

BBA BRITISH BOARD OF AGRÉMENT
TECHNICAL APPROVALS FOR CONSTRUCTION

Designated by Government to issue European Technical Approvals

RENDALATH METAL LATHS

Lattice métallique
Metall-lattenwerk

Product

• THIS CERTIFICATE REPLACES CERTIFICATE No 89/2322 AND RELATES TO RENDALATH METAL LATHS, GALVANIZED STEEL OR STAINLESS STEEL LATHS USED AS A SUPPORT FOR INTERNAL PLASTERING TO BS 5492 : 1990, OR EXTERNAL RENDERING TO BS 5262 : 1991 AS DESCRIBED IN THE ACCOMPANYING DETAIL SHEETS.

These Front Sheets must be read in conjunction with the accompanying Detail Sheets, which provide information specific to the laths.

Regulations — Detail Sheet 1

1 The Building Regulations 2000 (as amended) (England and Wales)

In the opinion of the British Board of Agrément, Rendalath Metal Laths are not subject to these Regulations.

2 The Building Standards (Scotland) Regulations 1990 (as amended)

In the opinion of the BBA, Rendalath Metal Laths are not subject to these Regulations.

3 The Building Regulations (Northern Ireland) 2000

In the opinion of the BBA, Rendalath Metal Laths are not subject to these Regulations.

4 Construction (Design and Management) Regulations 1994 (as amended)
Construction (Design and Management) Regulations (Northern Ireland) 1995 (as amended)

In the opinion of the BBA there is no information in this Certificate which relates to the obligations of the client, planning supervisor, designer and contractors to address their obligations under these Regulations.

Technical Investigations

The following is a summary of the technical investigations carried out on Rendalath Metal Laths.

5 Tests

5.1 As part of the assessment resulting in the issue of Certificate No 89/2322 and previous Certificates, tests were carried out on Rendalath Metal Laths:

- fixed to the vertical surfaces of timber stud partitions, to determine:
  - ease of fixing
  - ease of rendering, in two-coat work
  - ease of plaster application, both by hand and machine, in three-coat work
  - plaster penetration and bonding, including wastage
  - resistance to vibration
  - resistance to impact.
- fixed to horizontal surfaces of suspended ceilings, to determine:
  - ease of fixing
  - ease of hand plastering in three-coat work
  - plaster adhesion and bonding (pull-off tests).

5.2 As part of the assessment leading to the reissue of this Certificate, tests were carried out on the modified design to determine:

- ease of fixing
- ease of rendering
- render penetration and bonding, including wastage and depth of cover of the galvanized mesh at the rear of the product.

6 Investigations

6.1 Visits were made to commercial and industrial sites where Rendalath had been in use for up to five years to assess its performance under service conditions.

6.2 A user survey was conducted to evaluate performance in use.

6.3 As part of the assessment leading to the issue of this Certificate, a re-examination was made of the data and investigations on which the previous Certificates were based. The conclusions drawn from the original data remain valid.

6.4 Regular factory inspections have been carried out to ensure that product quality is being maintained.

6.5 No failure of the product in use has been reported to the BBA.

Bibliography

BS 5262 : 1991 *Code of practice for external renderings*

BS 5492 : 1990 *Code of practice for internal plastering*

Conditions of Certification

7 Conditions

7.1 This Certificate:

(a) relates only to the product that is described, installed, used and maintained as set out in this Certificate;

(b) is granted only to the company, firm or person identified on the front cover — no other company, firm or person may hold or claim any entitlement to this Certificate;

(c) is valid only within the UK;

(d) has to be read, considered and used as a whole document — it may be misleading and will be incomplete to be selective;

(e) is copyright of the BBA;

(f) is subject to English law.

7.2 References in this Certificate to any Act of Parliament, Regulation made thereunder, Directive or Regulation of the European Union, Statutory Instrument, Code of Practice, British Standard, manufacturers' instructions or similar publication, are references to such publication in the form in which it was current at the date of this Certificate.

7.3 This Certificate will remain valid for an unlimited period provided that the product and the manufacture and/or fabrication including all related and relevant processes thereof:

(a) are maintained at or above the levels which have been assessed and found to be satisfactory by the BBA;

(b) continue to be checked as and when deemed appropriate by the BBA under arrangements that it will determine; and

(c) are reviewed by the BBA as and when it considers appropriate.

7.4 In granting this Certificate, the BBA is not responsible for:

(a) the presence or absence of any patent or similar rights subsisting in the product or any other product;

(b) the right of the Certificate holder to market, supply, install or maintain the product; and

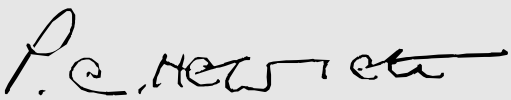
(c) the nature or standard of individual installations of the product or any maintenance thereto, including methods and workmanship.

7.5 Any recommendations relating to the use or installation of this product which are contained or referred to in this Certificate are the minimum standards required to be met when the product is used. They do not purport in any way to restate the requirements of the Health & Safety at Work etc Act 1974, or of any other statutory, common law or other duty which may exist at the date of this Certificate or in the future; nor is conformity with such recommendations to be taken as satisfying the requirements of the 1974 Act or of any present or future statutory, common law or other duty of care. In granting this Certificate, the BBA does not accept responsibility to any person or body for any loss or damage, including personal injury, arising as a direct or indirect result of the installation and use of this product.

BBA BRITISH BOARD OF AGRÉMENT
TECHNICAL APPROVALS FOR CONSTRUCTION

In the opinion of the British Board of Agrément, Rendalath Metal Laths are fit for their intended use provided they are installed, used and maintained as set out in this Certificate. Certificate No 93/2953 is accordingly awarded to BRC Special Products.

On behalf of the British Board of Agrément



Date of Third issue: 29th June 2004

Chief Executive

**Original Certificate issued on 25th October 1993. This version issued to include change of Certificate holder's name and e-mail address, reference to revised national Building Regulations, CDM Regulations and British Standards and new* Conditions of Certification.

British Board of Agrément
P O Box No 195, Bucknalls Lane
Garston, Watford, Herts WD25 9BA
Fax: 01923 665301

e-mail: mail@bba.star.co.uk
website: www.bbacerts.co.uk

CI/SfB
(4-) Jh

BRITISH BOARD OF AGRÉMENT
TECHNICAL APPROVALS FOR CONSTRUCTION

BRC Special Products

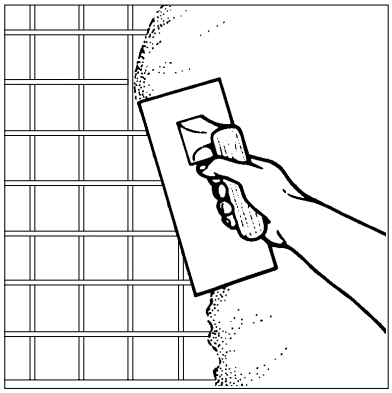
RENDALATH SR1 AND SRM1 METAL LATHS

Certificate No 93/2953

DETAIL SHEET 3

*Third issue**

Product



- *THIS DETAIL SHEET RELATES TO RENDALATH SR1 AND SRM1 METAL LATHS, FORMED FROM STAINLESS STEEL MESH WITH GALVANIZED BACKING WIRES ENCLOSING A LAYER OF CHIPBOARD PAPER, WITH AN OPTIONAL BACKING OF BREATHER MEMBRANE TO BS 4016 : 1997.*
- *The product is used in severe conditions as a support for external rendering in accordance with BS 5262 : 1991 or as a support for thin-coat renderings.*

This Detail Sheet must be read in conjunction with the Front Sheets, which give the product's position regarding the Building Regulations, general information relating to the product, and the Conditions of Certification.

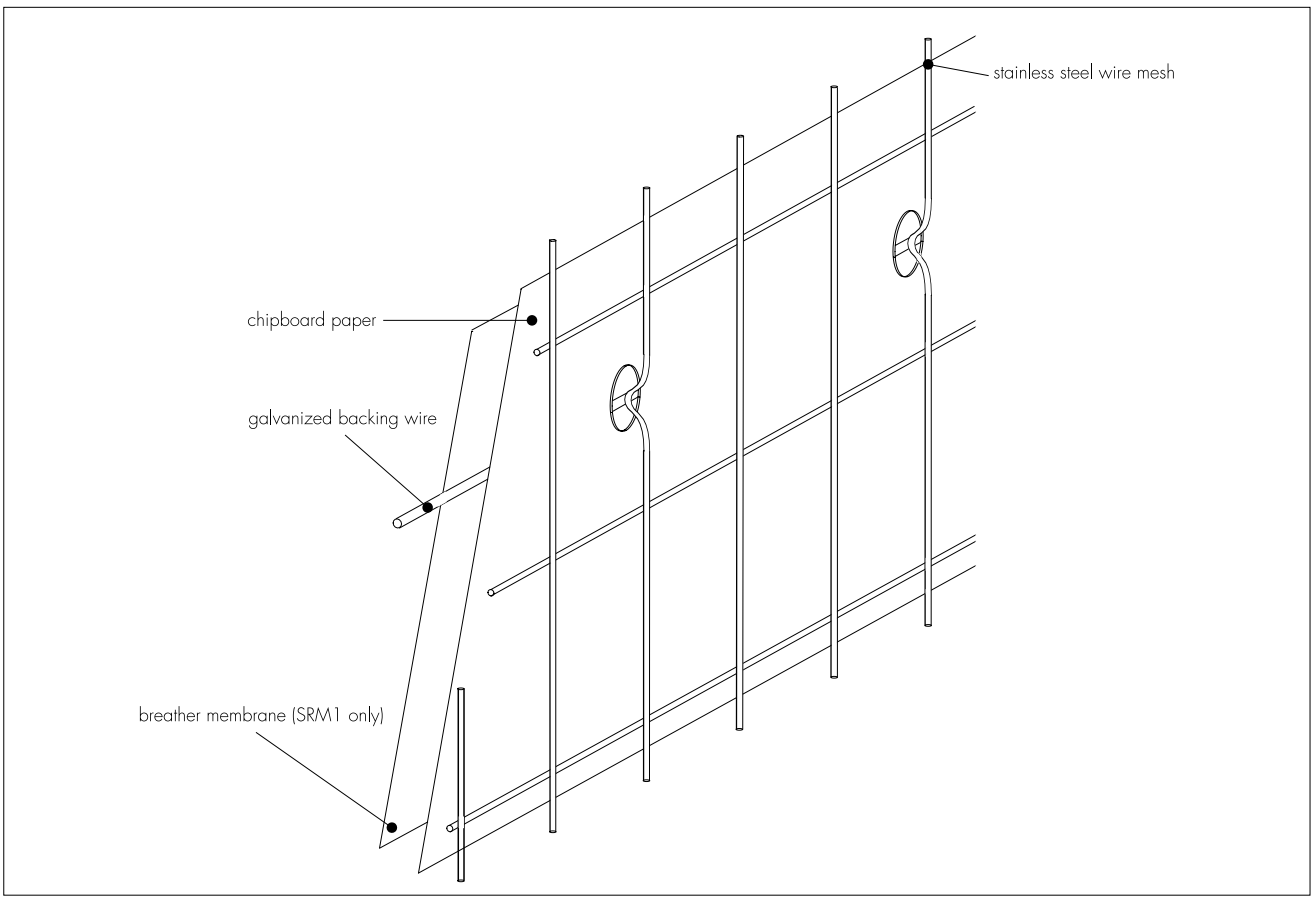
Technical Specification

1 Description

1.1 Rendalath SR1 and SRM1 Metal Laths are panels formed from 1.5 mm diameter stainless steel wires to BS EN 10088-1 : 1995 running horizontally and vertically and welded at 50 mm intervals to form a uniform mesh.

1.2 Chipboard paper is installed behind the wire mesh. To give rigidity to the panels, 3.15 mm diameter galvanized backing wires, running horizontally at a rate of five per panel, are installed behind the chipboard paper. The backing wire is spot-welded to spot-crimps in the front mesh at horizontal intervals of 150 mm through holes punched in the chipboard paper (see Figure 1).

Figure 1 Rendalath SR1 and SRM1 Metal Laths



1.3 All galvanized wire used in the product conforms to BS 4102 : 1998 and BS EN 10244-2 : 2001.

1.4 The panel size is 2450 mm by 650 mm.

1.5 In addition, Rendalath SRM1 metal lath panels have a breather membrane adhered to the back of the panel. They are used for timber frame housing and for situations where a barrier membrane is required, eg for fixing directly onto a contaminated background.

1.6 Tests on raw materials are conducted on:

- diameter of wire
- quality of welding and crimping
- width of chipboard and breather membrane
- thickness of chipboard and breather membrane.

1.7 The finished product is inspected and non-destructively tested.

2 Delivery and site handling

2.1 Packs of Rendalath SR1 and SRM1 are marked with the product name and carry a label bearing the manufacturer's name and the BBA identification mark incorporating the number of this Certificate. Installation instructions are included in each pack.

2.2 The sheets should be stored flat and under cover.

Design Data

3 General

3.1 Rendalath SR1 and SRM1 Metal Laths are satisfactory for use in severe conditions as a support for external rendering to BS 5262 : 1991, as a support for thin-coat renderings, or in permanently wet situations. The bond strength between the lath and render is satisfactory and the resistance to impact is similar to that of a conventional lath.

3.2 The chipboard paper and backing substantially reduce the volume of wasted rendering.

4 Properties in relation to fire

4.1 The performance in fire of rendering or plaster on Rendalath SR1 and SRM1 is similar to that for conventional metal lathing.

4.2 Where a particular fire resistance period is required for a structure rendered with a thin coat rendering, the appropriate fire test or an assessment of the structure's performance should be conducted by a fire laboratory possessing a UKAS accreditation for the test.

5 Maintenance

Conventional rendering techniques are used to repair damage.

6 Durability

The stainless steel wires will not corrode, and the rendered product will have a substantially greater life than that of the conventional laths described in BS 5262 : 1991.

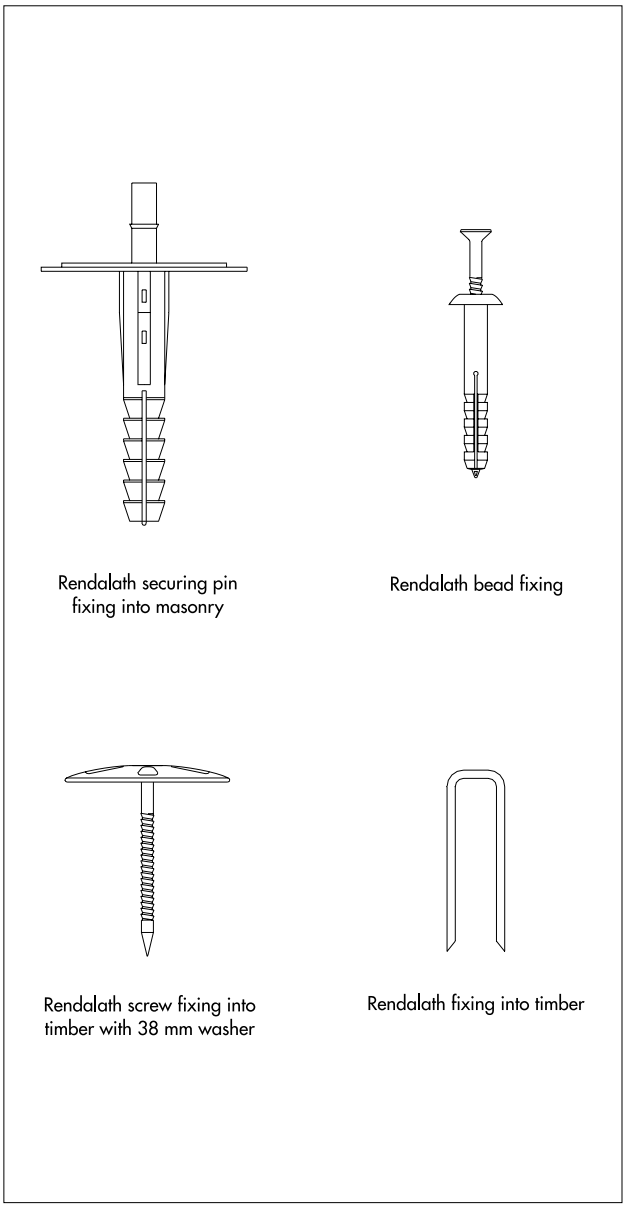
Installation

7 Procedure

7.1 Installation of Rendalath SR1 and SRM1 Metal Laths should be carried out in accordance with the Certificate holder's fixing instructions.

7.2 All fixings used must be suitably protected against corrosion, as outlined in BS 5492 : 1990. For example, stainless steel nails with a nylon sleeve or polypropylene pins and sleeves are used to secure the product to masonry. Stainless steel staples are used to secure the product to timber. Nails and staples must be of Grade 1.4301 austenitic stainless steel. A selection of fixings are shown in Figure 2.

Figure 2 Fixings



7.3 Any timber frame used must be of durable timber or preservative treated in accordance with BS 5268-5 : 1989, Table 4.

7.4 To satisfy NHBC requirements, timber frame constructions must use the SRM1 lathing with a minimum cavity width of 25 mm between the lath and the sheathing.

7.5 The product is positioned on walls, ensuring the longer wires run horizontally and fixed at the preformed crimps at 600 mm horizontal centres. The vertical spacing of the fixings depends on the type used. For screw fixings, three are used on the bottom panel and then two per overlapping panel. For staples, five are used for the bottom panel and then four per overlapping panel.

7.6 Horizontal and vertical laps of 50 mm should be made between panels and wire-tied at intervals of 250 mm.

7.7 Vertical joints are staggered and the sheets arranged to avoid having joints at corners, or in line with door or window frames.

7.8 After fixing, the product is rendered in accordance with BS 5262 : 1991 or with a thin-coat rendering.

Bibliography

BS 4016 : 1997 *Specification for flexible building membranes (breather type)*

BS 4102 : 1998 *Specification for steel wire for general fencing purposes*

BS 5262 : 1991 *Code of practice for external renderings*

BS 5268-5 : 1989 *Structural use of timber — Code of practice for the preservative treatment of structural timber*

BS 5492 : 1990 *Code of practice for internal plastering*

BS EN 10088-1 : 1995 *Stainless steels — List of stainless steels*

BS EN 10244-2 : 2001 *Steel wire and wire products — Non-ferrous metallic coatings on steel wire — Zinc or zinc alloy coatings*

BBA BRITISH BOARD OF AGRÉMENT
TECHNICAL APPROVALS FOR CONSTRUCTION

On behalf of the British Board of Agrément

Date of Third issue: 29th June 2004

Chief Executive

**Original Detail Sheet issued on 25th October 1993. This version issued to include change of company name, and reference to revised British Standards.*

British Board of Agrément
P O Box No 195, Bucknalls Lane
Garston, Watford, Herts WD25 9BA
Fax: 01923 665301

e-mail: mail@bba.star.co.uk
website: www.bbacerts.co.uk

CI/SfB
(4-) Jh

BRC Special Products

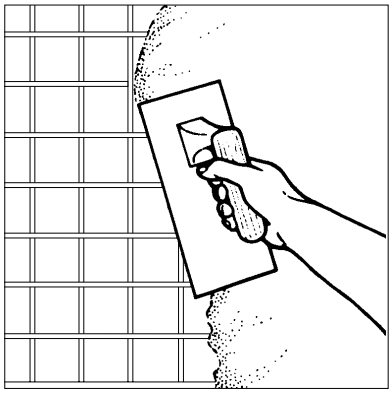
RENDALATH GR1 AND GRM1 METAL LATHS

Certificate No 93/2953

DETAIL SHEET 4

*Third issue**

Product



- *THIS DETAIL SHEET RELATES TO RENDALATH GR1 AND GRM1 METAL LATHS, FORMED FROM GALVANIZED MESH WITH GALVANIZED BACKING WIRES ENCLOSING A LAYER OF CHIPBOARD PAPER, WITH AN OPTIONAL BREATHER MEMBRANE TO BS 4016 : 1997.*
- *The product is used in moderate or sheltered conditions, as a support for external rendering in accordance with BS 5262 : 1991 or for internal plastering in accordance with BS 5492 : 1990 in either dry or permanently wet conditions such as laundries, commercial kitchens, and swimming pools.*

This Detail Sheet must be read in conjunction with the Front Sheets, which give the product's position regarding the Building Regulations, general information relating to the product, and the Conditions of Certification.

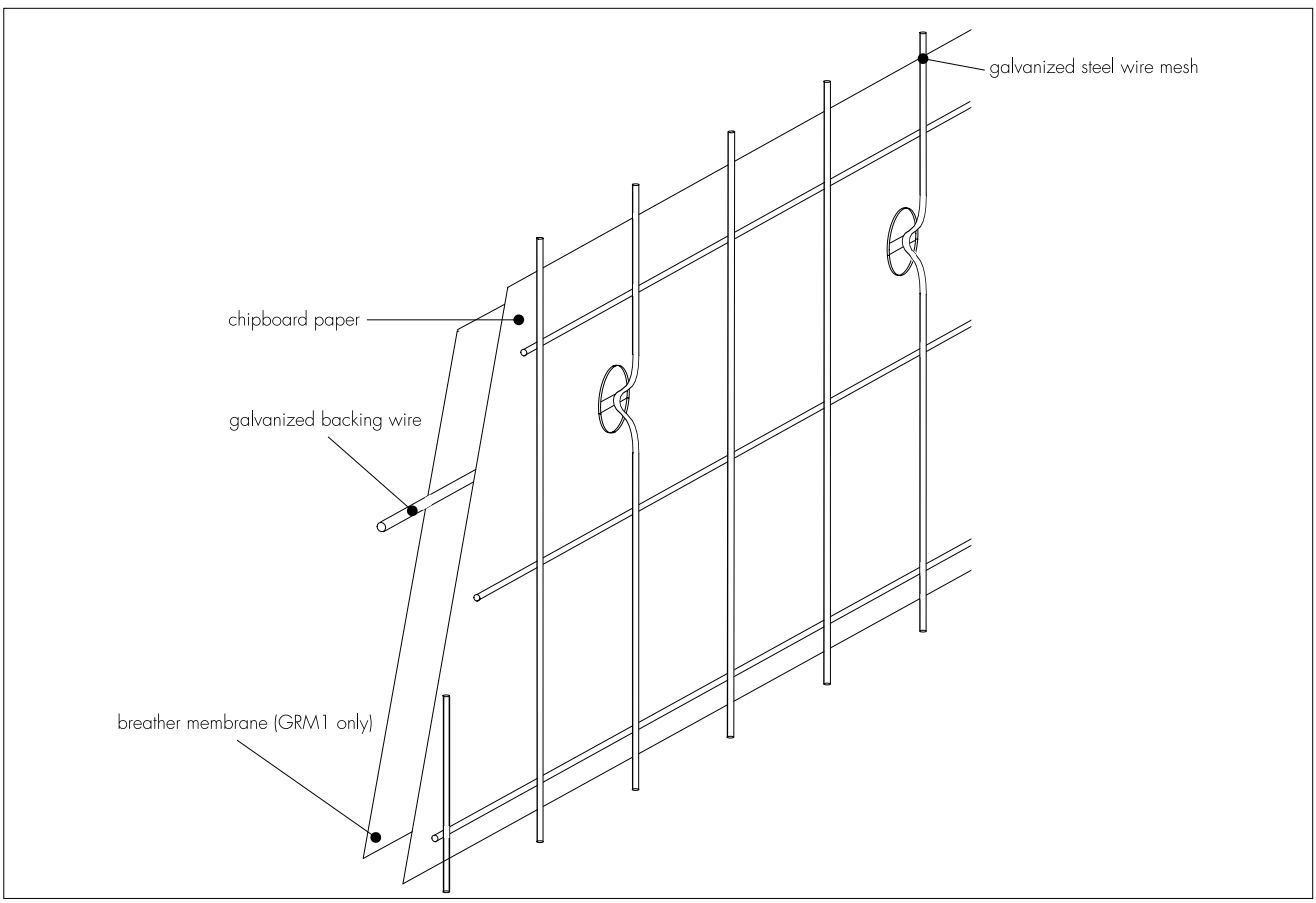
Technical Specification

1 Description

1.1 Rendalath GR1 and GRM1 Metal Laths are panels formed from 1.5 mm diameter galvanized steel wires running horizontally and vertically and welded at 50 mm intervals to form a uniform mesh.

1.2 Chipboard paper is installed behind the wire mesh. To give rigidity to the panels, 3.15 mm diameter galvanized backing wires, running horizontally at a rate of five per panel, are installed behind the chipboard paper. The backing wire is spot-welded to spot-crimps in the front mesh at intervals of 150 mm through holes punched in the chipboard paper (see Figure 1).

Figure 1 Rendalath GR1 and GRM1 Metal Laths



1.3 All galvanized wire used in the product conforms to BS 4102 : 1998 and BS EN 10244-2 : 2001.

1.4 The panel size is 2450 mm by 650 mm.

1.5 In addition, Rendalath GRM1 metal lath panels have a breather membrane adhered to the back of the panel. They are used for timber frame housing and for situations where a barrier membrane is required, eg for fixing directly onto a contaminated background.

1.6 Tests on raw materials are conducted on:

- diameter of wire
- quality of galvanizing, welding and crimping
- width of chipboard paper
- thickness of chipboard paper.

1.7 The finished product is inspected and non-destructively tested.

2 Delivery and site handling

2.1 Packs of Rendalath GR1 and GRM1 are marked with the product name and carry a label bearing the manufacturer's name and the BBA identification mark incorporating the number of this Certificate. Installation instructions are included in each pack.

2.2 The sheets should be stored flat and under cover.

Design Data

3 General

3.1 Rendalath GR1 and GRM1 Metal Laths are satisfactory for use with internal plastering to BS 5492 : 1990 or external rendering to BS 5262 : 1991.

3.2 Plastered or rendered Rendalath GR1 and GRM1 has a similar impact resistance to conventionally plastered or rendered laths.

3.3 The chipboard paper layer substantially reduces the volume of wasted plaster or render.

4 Deflection

On ceilings the lath may sag, depending on the tension applied during installation. The extent of sagging will be similar to that of a conventional metal lath, and can be taken up during dubbing out.

5 Properties in relation to fire

5.1 The performance in fire of plaster or render on Rendalath GR1 and GRM1 is similar to that of plaster or render on conventional metal lathing.

5.2 The notional periods of fire resistance for structures of conventional metal lathing and render or plaster are given in BRE Report Guidelines for the construction of fire resisting structural elements, 1988.

6 Maintenance

Conventional plastering or rendering techniques are used to repair damage.

7 Durability

The design of the lath is such that a high proportion of the wire and its joints are covered by the plaster or render. Consequently, plastering or rendering incorporating Rendalath GR1 or GRM1 will have a life similar to that of conventional plastering or rendering.

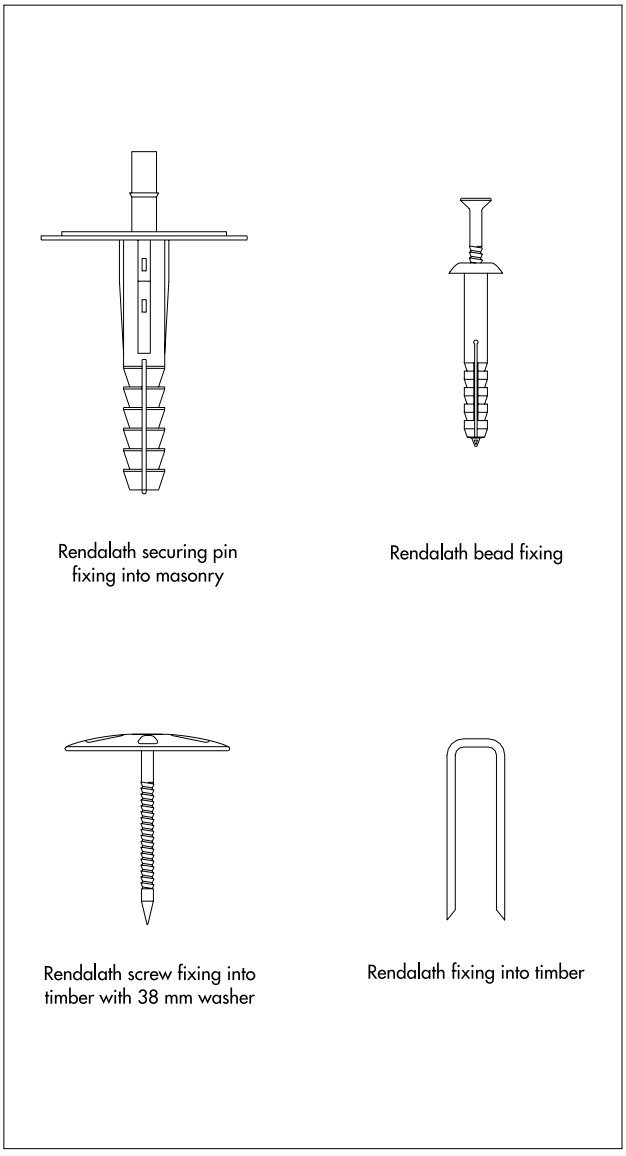
Installation

8 Procedure

8.1 Installation of Rendalath GR1 and GRM1 Metal Laths should be carried out in accordance with the Certificate holder's fixing instructions.

8.2 All fixings used must be suitably protected against corrosion, as outlined in BS 5492 : 1990. Nails and staples must be of grade 1.4301 austenitic stainless steel. A selection of fixings are shown in Figure 2.

Figure 2 Fixings



8.3 Any timber frame used must be of durable or preservative treated in accordance with BS 5268-5 : 1989, Table 4.

8.4 To satisfy NHBC requirements, timber frame constructions must use the GRM1 lathing with a minimum cavity width of 25 mm between the lath and the sheathing.

8.5 The product is positioned on walls, ensuring the longer wires running horizontally and fixed at the preformed crimps at 600 mm horizontal centres. The vertical spacing of the fixings depends on the type used. For screw fixings, three are used on the bottom panel and then two per overlapping panel. For staples, five are used on the bottom panel and then four per overlapping panel.

8.6 Vertical joints are staggered and the sheets arranged to avoid having joints at corners of the room, or in line with door or window frames.

8.7 On ceilings, the product is fixed to supports at 300 mm centres.

8.8 Horizontal and vertical laps of 50 mm should be made between panels and wire-tied at intervals of 250 mm.

8.9 After fixing, the product is plastered with metal lathing grade plaster, or lightweight aggregate gypsum plaster in accordance with BS 5492 : 1990 or rendered in accordance with BS 5262 : 1991.

Bibliography

BS 4016 : 1997 *Specification for flexible building membranes (breather type)*

BS 4102 : 1998 *Specification for steel wire for general fencing purposes*

BS 5262 : 1991 *Code of practice for external renderings*

BS 5268-5 : 1989 *Structural use of timber — Code of practice for the preservative treatment of structural timber*

BS 5492 : 1990 *Code of practice for internal plastering*

BS EN 10244-2 : 2001 *Steel wire and wire products — Non-ferrous metallic coatings on steel wire — Zinc or zinc alloy coatings*

BBA BRITISH BOARD OF AGRÉMENT
TECHNICAL APPROVALS FOR CONSTRUCTION

On behalf of the British Board of Agrément

Date of Third issue: 29th June 2004

Chief Executive

**Original Detail Sheet issued on 25th October 1993. This version issued to include change of company name, and reference to revised British Standards.*

British Board of Agrément
P O Box No 195, Bucknalls Lane
Garston, Watford, Herts WD25 9BA
Fax: 01923 665301

e-mail: mail@bba.star.co.uk
website: www.bbacerts.co.uk